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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known					
Application Number	10/687,541				
Filing Date	October 16, 2003				
Confirmation Number	7748				
First Named Inventor	David A. Morgenstern				
Group Art Unit	Not Yet Assigned				
Examiner Name	Not Yet Assigned				
Attorney Docket No.	MTC 6888.2 (39-21(52925)C)				

U.S. PATENT DOCUMENTS

8

•		U.S. Patent Doc	ument		Date of Publication of Cited Document MM-DD-YYYY	
Examiner Initials*	Cite No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document		
AE	1	3,522,0191		Buswell et al.	07-28-1970	
	2	4,024,044		Brannan et al.	05-17-1977	
	3	4,287,365		Becker et al.	09-01-1981	
	4	5,292,936		Franczyk	03-08-1994	
	5	5,536,694		Schuetz et al.	07-16-1996	
	6	5,627,125		Ebner et al.	05-06-1997	
	7	5,928,614		Autenrieth et al.	07-27-1999	
	8	5,935,277		Autenrieth et al.	08-10-1999	
	9	6,209,494	B1	Manikowski, Jr. et al.	04-03-2001	
	10	6,284,703	B1	Ostgard et al.	09-04-2001	
	11	6,309,758	B1	Schmidt	10-30-2001	
AE	12	2002/0019564	A1	Morgenstern et al.	02-14-2002	

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1	Examiner	/Alix Echelmeyer/	Date	08/24/2006
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PTO/SB	/08A			Complete if Known		
1	IFORMATION	DISC	LOSURE	Application Number	10/687,541	
1	TATEMENT B			Filing Date	October 16, 2003	
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				First Named Inventor	David A. Morgenstern	
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Sheet	2	of	8	Attorney Docket No. MTC 6888.2 (39-21(52925)C)		

	13	6,376,7	00 ===	B1	Morgenstern et al.	04-23-2002		
			FOR	EIGN PATI	ENT DOCUMENTS			
		F	oreign Patent Do	cument				
Examiner Initials*	Cite No. ¹	Office	Number ⁴	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ₆	
AE	14	EP	0 648 534	A1	Degussa (DE)	04-19-1995	Α	
AE	15	wo	01/00320	A1	Lisse et al.	01-04-2001		
Examiner Initials*	Cite No.1	Includ	e name of the au	thor (in CAPITA	AL LETTERS), title of the article (when ial, symposium, catalog, etc.) date, pather, city and/or country where publish	appropriate), title of the ge(s), volume-issue	T ₆	
AE	16	AGREL Chemis	AGRELL, Johan, et al., "Catalytic Hydrogen Generation from Methanol", <i>The Royal Society of Chemistry</i> , 2002, Pages 67-132, Volume 16					
AE	17	ALEJO Applied	, L., et al., "Partia d Catalysis A: Ge	I Oxidation of Nanceral, 1997, Pa	Methanol to Produce Hydrogen over Cages 281-297, Volume 162	u-Zn-based Catalysts",		

Examiner Signature	/Alix Echelmeyer/	Date Considered	08/24/2006

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Sheet	3	of	8	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)		

Al	E	18	AMPHLETT, J.C., et al., "A Deactivation Model for Methanol-Steam Reformation on Cu/CnO/Al ₂ O ₃ Catalyst for Optimizing the Production of Fuel-Cell Hydrogen", Studies in Surface Science and Catalysis, 2001, Pages 205-212, Volume 139	
		19	AMPHLETT, J.C., et al., "On Board Hydrogen Purification for Steam Reformation/PEM Fuel Cell Vehicle Power Plants", <i>International Journal of Hydrogen Energy</i> , 1996, Pages 673-678, Volume 21, Number 8	
		20	APPLEBY, A.J., "Fuel Cells Can Power Cleaner Buses and Cars, But Key Engineering and Economic Obstacts Will Delay Widespread Adoption of the Technology", The Electrochemical Engine for Vehicles, Scientific American, July 1999, Pages 74-79	:
		21	AUGUSTINE, R.L., Catalytic Hydrogenation Techniques and Applications in Organic Synthesis, 1965, Pages 147-149, Marcel Dekker, Inc., New York City, NY	
		22	BAUER, C.G., et al., "Effect of Hydrogen Addition on the Performance of Methane-Fuelced Vehicles. Part I: Effect on S.I. Engine Performance", <i>International Journal of Hydrogen Energy</i> , 2001, Pages 55-70, Volume 26	
		23	BECKER, H.J., et al., Scifinder Abstract for German Patent No. 2,713,374 (1977)	Α
		24	BLACK, F., "An Overview of the Technical Implications of Methanol and Ethanol as Highway Motor Vehicle Fuels", SAE Technical Paper Series, No. 912413, October 1991, Pages 1-30	
		25	BREEN, J.P., et al., "Mechanistic Aspects of the Steam Reforming of Methanol over a CuO/ZnO/ZrO₂/Al₂O₃ Catalyst", <i>Chem. Commun.</i> , 1999, Pages 2247-2248, The Royal Society of Chemistry, Cambridge, United Kingdom	
		26	BRIDGEWATER, A.J., et al., "Methanol Synthesis Over Raney Copper-Zinc Catalysts. II. Optimization of Alloy Composition and Catalyst Preparation", <i>Applied Catalysis</i> , 1983, Pages 369-382, Volume 7	
	AE	27	CAIRNS, J.F., et al., "Advances in ICI's Activated Cathode Technology for Chlor-Alkali Production", Advances in Mathematical Modeling and Simulation of Electrochemical Processes and Oxygen Depolarized Cathodes, 1998, Pages 289-296	

Examiner	/Alix Echelmeyer/	Date	08/24/2006
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet	4	of	8	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

				_
	AE		CAVALLARO, S., et al., "Hydrogen Produced from Ethanol for Internal Reforming Molten Carbonate Fuel Cell", Journal of Power Sources, 2001, Pages 198-204, Volume 102	
		29	CHENG, Wu-Hsun, "Development of Methanol Decomposition Catalysts for Production of H ₂ and CO", Accounts of Chemical Research, 1999, Pages 685-691, Volume 32, Number 8	
		30	CHENG, Wu-Hsun, "Reaction and XRD Studies on Cu Based Methanol Decomposition Catalysts: Role of Constituents and Development of High-Activity Multicomponent Catalysts", <i>Applied Catalysis A: General</i> , 1995, Pages 13-30, Volume 130	
_ ;		31	DAS, L.M., "Hydrogen Engines: A View of the Past and a Look into the Future", International Journal of Hydrogen Energy, 1990, Pages 425-443, Volume 15, Number 6	
	32		DAVIS, G.W., et al., "Ethanol Vehicle Cold Start Improvement When Using a Hydrogen Supplemented E85 Fuel", <i>Proc. Intersoc. Energy Convers. Eng. Con.</i> , 2000, Pages 303-308, Volume 1, Number 35	
		33	FATSIKOSTAS, A.N., "Steam Reforming of Biomass-Derived Ethanol for the Production of Hydrogen for Fuel Cell Applications", CHEMCOMM Communication, 2001	
		34	FIERRO, V., et al., "Oxidative Reforming of Biomass Derived Ethanol for Hydrogen Production in Fuel Cell Applications", Catalysis Today, 2002, Pages 141-144, Volume 75	
	·	35	FRENI, S., et al., "Hydrogen Production by Steam Reforming of Ethanol: A Two Step Process", React. Kinet. Catal. Lett., 2000, Pages 143-152, Volume 71, Number 1	. !
		36	GATES, S.M., et al., "Bond Activation Sequence Observed in the Chemisorption and Surface Reaction of Ethanol on Ni(111)", <i>Surface Science</i> , 1986, Pages 111-134, Volume 171, North-Holland, Amsterdam	
		37	GERSTEN et al., "Thermal Conductivity", <i>The Physics and Chemistry of Material</i> , 2001, Page 144, Wiley & Sons, New York City, New York	
AE 38 GREIN Techn		38	GREINER, L., et al., "Engine Cold-Start with Dissociated Methanol", Proc. Int. Symp. Alcohol Fuels Technol., Issue CONF-790520, Paper III-50, 1979, NTIS, Springfield, Virginia (Abstract)	

Examiner Signature	/Alix Echelmeyer/	Date Considered	08/24/2006

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Sheet	5	of	8	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

A	AE		GÜNTER, M.M., et al., "Redox Behavior of Copper Oxide/Zinc Oxide Catalysts in the Steam Reforming of Methanol Studied by <i>in situ</i> X-Ray Diffraction and Absorption Spectroscopy", <i>Journal of Catalysis</i> , 2001, Pages 133-149, Volume 203, Number 1	
	40		HAGA, F., et al., "Catalytic Properties of Supported Cobalt Catalysts for Steam Reforming of Ethanol", Catalysis Letters, 1997, Pages 223-227, Volume 48	
		41	HUSS, C., "Future Propulsion Systems and Fuels", Atomwirtschaft-Atomtechnik, December 2002, Pages 760-766, Volume 47, Number 12, Federal Republic of Germany (Abstract)	
		42	IDRISS, H., et al., "Reactions of Acetaldehyde on CeO₂ and Ceo₂-Supported Catalysts", <i>Journal of Catalysis</i> , 1995, Pages 219-237, Volume 155	
		43	IDRISS, H., et al., "Reactions of Ethanol Over Metal Oxides", Journal of Molecular Catalysis A: Chemical, March 2000, Pages 201-212, Volume 152, Issues 1-2	
		44	IWASA, N., et al., "Reforming of Ethanol-Dehydrogenation to Ethyl Acetate and Steam Reforming to Acetic Acid Over Copper-Based Catalysts", <i>Bull. Chem. Soc. Jpn.</i> , 1991, Pages 2619-2623, Volume 64, The Chemical Society of Japan	
		4,5	JIANG, C.J., et al., "Kinetic Mechanism for the Reaction Between Methanol and Water Over a Cu-ZnO-Al₂O₃ Catalyst", <i>Applied Catalysis A: General</i> , 1993, Pages 145-158, Volume 97	
		46	KELLER, J., et al., "Hydrogen Fueled Engines in Hybrid Vehicles", Society of Automotive Engineers, 2001, Pages 117-122	
		47	KLOUZ, V., et al., "Ethanol Reforming for Hydrogen Production in a Hybrid Electric Vehicle: Process Optimisation", Journal of Power Sources, 2002, Pages 26-34, Volume 105	
		48	LIEBER, E., et al., "The Uses of Raney Nickel", Pages 417-455	
	AE		LLOYD, et al., Catalyst Handbook, 2nd Ed., 1996, Pages 309-312, M.V. Twigg Ed., Manson Publishing, London, England	

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Sheet	6	of	8	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

AI I	3	50	LUENGO, C.A., et al., "A Novel Catalyst System for Ethanol Gasification", International Journal of Hydrogen Energy, 1992, Pages 677-681, Volume 17, Number 9
		51	MALAKOFF, D., "U.S. Supercars: Around the Corner, or Running on Empty?", Science Magazine, July 30, 1999, Pages 680-685, Volume 285
		52	MARIÑO, F., et al., "Hydrogen Production from Steam Reforming of Bioethanol Using Cu/Ni/K/γ-Al ₂ O ₃ Catalysts. Effect of Ni", <i>International Journal of Hydrogen Energy</i> , 2001, Pages 665-668, Volume 26
		53	MARIÑO, F., et al., "Steam Reforming of Ethanol Using Cu-Ni Supported Catalysts", Studies in Surface Science and Catalysis, 2000, Pages 2147-2152, Volume 130
		54	MATSUMURA, Y., et al., "Catalytic Methanol Decomposition to Carbon Monoxide and Hydrogen Over Nickel Supported on Silica", <i>Journal of Molecular Catalysis A: Chemical</i> , March 2000, Pages 157-165, Volume 152, Issues 1-2
		55	MATTHEWS, R.D., "Internal Combusion Engines", Chapter 59, Mechanical Engineers' Handbook, 2nd Ed, 1998, Pages 1801-1822
		56	MURCIA-MASCARÓS, S., et al., "Oxidative Methanol Reforming Reactions on CuZnAl Catalysts Derived from Hydrotalcite-like Precursors", <i>Journal of Catalysis</i> , 2001, Pages 338-347, Volume 198
		57	ORCHARD, J.P., et al., " Preparation and Properties of Raney Nickel-Cobalt Catalysts", <i>Journal of Catalysis</i> , 1983, Pages, 189-199, Volume 84
		58	PETTERSSON, L.J., "State of the Art of Multi-Fuel Reformers for Fuel Cell Vehicles: Problem Identification and Research Needs", <i>International Journal of Hydrogen Energy</i> , 2001, Pages 243-264, Volume 26
		59	REITZ, T.L., et al., "Methanol Reforming Over CuO/ZnO Under Oxidizing Conditions", Studies in Surface Science and Catalysis, 2000, Pages 3645-3650, Volume 130
I	AE		REITZ, T.L., et al., "Time-Resolved XANES Investigation of CuO/ZnO in the Oxidative Methanol Reforming Reaction", <i>Journal of Catalysis</i> , 2001, Pages 193-201, Volume 199

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Sheet	7	of	8	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

AE	61	SCHMIDT, S.R., "Surfaces of Raney® Catalysts", Catalysis of Organic Reactions, 1995, Scaros and Prunier eds., Pages 45-59
	62	SCHOUBYE, P., "Methanation of CO on Some Ni Catalysts", <i>Journal of Catalysis</i> , 1969, Pages 238-246, Volume 14
	63	SHENG, PY., et al., "H ₂ Production from Ethanol over Rh-Pt/CeO ₂ Catalysts: The Role of Rh for the Efficient Dissociation of the Carbon-Carbon Bond", <i>Journal of Catalysis</i> , 2002, Pages 393-403, Volume 208
	64	SILLITTO, S.M.A., et al., "Electrochemical Testing and Structural Characterization of Nickel-based Catalytic Coatings Produced by Direct Spraying", Materials Research Society Symposium Proceedings, 1999, Pages 23-29
	65	TROMP, T.K., et al., "Potential Environmental Impact of a Hydrogen Economy on the Stratosphere", Science Magazine, June 13, 2003, Pages 1740-1742, Volume 300
	66	TU, YJ., et al., "Effect of Chromium Promoter on Copper Catalysts in Ethanol Dehydrogenation", Journal of Chemical Technology and Biotechnology, 1994, Pages 141-147, Volume 59; Issue 2 (Abstract)
	67	TULLO, A. H., "A Fuel Cell in Every Car", C&EN Northeast New Bureau, March 5, 2001, Pages 19-22
	68	VELU, S., et al., "Selective Production of Hydrogen for Fuel Cells Via Oxidative Steam Reforming of Methanol Over CuZnAl(Zr)-oxide Catalysts", <i>Applied Catalysis A: General</i> , May 14, 2001, Pages 47-63, Volume 213, Issue 1
	69	WAINWRIGHT, M.S., et al., "Raney Nickel-Copper Catalysts II. Surface and Pore Structures", Journal of Catalysis, 1980, Pages 124-131, Volume 64
AE	70	WAINWRIGHT, M.S., "Raney Copper and Raney Copper-Zinc Catalysts", Chem. Ind., 1996, Pages 213-230, Volume 68

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1	AE I	71	YEE, A., et al., "A Study of the Reactions of Ethanol on CeO ₂ and Pd/CeO ₂ by Steady State Reactions, Termperature Programmed Desorpotion, and <i>In Situ FT-IR</i> ", <i>Journal of Catalysis</i> , 1999, Pages 279-295, Volume 186					
	72		YOUNG, D.J., et al., "Raney Nickel-Copper Catalysts I. Structure and Leaching Properties", Journal of Catalysis, 1980, Pages 116-123, Volume 64					
	73 74 75		BASF Catalyst for Daimler-Benz Car, European Chemical News, May 1998, Page 22					
			EPRI Journal, May/June 1997, Pages 8-17					
			Hawley's Condensed Chemical Dictionary, 13th Ed., 1997, Pages 621-622, Rev. by R. J. Lewis, Sr., Van Nostrand Reinhold, New York City, NY					
	76	76	76	Hawley's Condensed Chemical Dictionary, 13th Ed., Page 955, Rev. by R. J. Lewis, Sr., Van Nostrand Reinhold, New York City, NY, 1997				
		77	Kirk-Othmer Encyclopedia of Chemical Technology, 4th Ed., Pages 258, 272 and 291, Vol. 16, John Wiley & Sons, New York City, NY	,				
AE		78	Perry's Chemical Engineers' Handbook, 6th Ed., Page 23-42 to 23-49, Krisher and Seibert, McGraw Hill, New York City, New York					

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	Application Number		10687541	
	Filing Date		2003-10-16	
INFORMATION DISCLOSURE	First Named Inventor Morge		genstern	
STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Art Unit		1745	
(Not for submission under 57 Of K 1.55)	Examiner Name		John S. Maples	
	Attorney Docket Number		40-21(52925)C; MTC 6888.2	

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First Named Inventor	Morg	enstern			
Art Unit		1745			
Examiner Name John		n S. Maples			
Attorney Docket Numb	er	40-21(52925)C; MTC 6888.2			

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Standard ST 31). 3 For Japa nent by the a	O Patent Documents at <u>www.USPTO.GOV</u> or MPEP 901. anese patent documents, the indication of the year of the nappropriate symbols as indicated on the document under Van is attached.	eign of the Emperor must precede the serial	number of the patent document.

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CATEMO	TEMENT B	Y AP	PLICANI	Confirmation Number	7748	
(use	e as many shee	ets as	necessary)	First Named Inventor	David A. Morgenstern	
				Group Art Unit	1746	
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Sheet	1	of	2	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

	•	•	U	.S. PATENT	DOCUMENTS			
		U.S. Patent Document						
Examiner Initials*	Cite No.1		Number		Name of Patentee or Applicant of Cited Document	Date of Publication of C Document MM-DD-YYYY	cited	
	79	3,454,3	64		v. Sturm et al.	07-08-1969		
	80	6,432,8	71	B1	Bachinger et al.	08-13-2002		
			FOR	REIGN PATE	ENT DOCUMENTS			
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Examiner Initials*	Cite No.1	Office	Number ⁴	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Τ ⁶	
AE	81	81 DE	195 34 433	C1	Kohnke	10-10-1996		
	82	EP	0 734 765	A1	Yamauchi et al.	10-02-1996		
	83	EP	0 920 064	A1	Pettit	06-02-1999		
AE	84	FR	2 795 339	A1	Pierre et al.	12-29-2000		
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^{&#}x27;Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

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	SUPPLE	MENT	'AL	Application Number	10/687,541	
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(use	e as many shee	ets as	necessary)	First Named Inventor	David A. Morgenstern	
				Group Art Unit	1746	
				Examiner Name	Not Yet Assigned	
Sheet	2	of	2	Attorney Docket No.	MTC 6888.2 (39-21(52925)C)	

	OTHER ART - NON PATENT LITERATURE DOCUMENTS											
Examiner Initials*		Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T⁰								
		85	International Search Report, PCT/US03/32919, from the European Patent Office dated March 19, 2004 (5 pages).									
		86	English language abstract for DE 195 34 433 obtained from http://www.espacenet.com									
AE	AE		English language abstract for FR 2 795 339 obtained from http://www.espacenet.com									

Examiner	/Alix Echelmeyer/	Date	08/24/2006
Signature		Considered	

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Examiner Initials*	Cite No.¹	Number Co		Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of C Document MM-DD-YYYY	ited	
AE	88	6,686,075		6,686,075 B2 Gieshoff et al.		02-03-2004		
	1	1	FO	REIGN PATI	ENT DOCUMENTS			
	Cite No.¹	Foreign Patent Document						
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THIRD	SUPPLEMEN	TAL I	NFORMATION	Application Number	10/687,541
	THIRD SUPPLEMENT L INFORMATION CHECK STATEMENT BY APPLICANT			Filing Date	October 16, 2003
S				Confirmation Number	7748
(use	as many shee	ets as	necessary)	First Named Inventor	David A. Morgenstern
				Group Art Unit	1745
				Examiner Name	John S. Maple
Sheet	1	of	1	Attorney Docket No.	MTC 6888.2; 39-21(52925)C

			U.S	S. PATENT	DOCUMENTS		
			U.S. Patent Docui	ment			
Name of Patentee or Applicant of Cited Document	Date of Publication of C Document MM-DD-YYYY	ited					
AE	89	6,794,3	31	B2	Ostgard et al.	09-21-2004	
	90	6,818,7	20	B2	Krauter et al.	11-16-2004	
	91	2004/01	199019	A1	Schmidt	10-07-2004	
AE	92	2005/00)49434	A1	Tustin et al.	03-03-2005	
			FORE	IGN PATE	ENT DOCUMENTS		
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Examiner Initials*	Cite No.¹	Office	Number⁴	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T⁵
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Examiner Signature	/Alix Echelmeyer/	Date Considered	08/24/2006

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	STATEMENT BY APPLICANT			Confirmation Number	7748	
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AE	93	2001/00	018402	A1	Ostgard et al.	08-30-2001	
AE	94	2002/00)99246	A1	Siebenhaar et al.	07-25-2002	
AE	95	2004/0	133045	A1	Okanobori et al.	07-08-2004	
	<u> </u>		FOR		ENT DOCUMENTS		
Examiner Initials*	Cite No. ¹	Office	Number ⁴	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T ⁶
AE	96	wo	00/32310	A1	Siebenhaar et al.	06-08-2000	
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Application Number	10/687,541			
Filing Date	October 16, 2003			
Confirmation Number	7748			
First Named Inventor	David A. Morgenstern			
Group Art Unit	1745			
Examiner Name	John S. Maples			
Attorney Docket No.	MTC 6888.2;			
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AE	97				E 195 34 433 C1, pages 1-8.		
AE	98	English la	anguage trans	lation of FF	R 2 795 339, pages 1-21.		

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PTO/SB/08A	Complete if	Known 10/687,541
PIOSBIOON	Application Number	October 16, 2003
SIXTH SUPPLEMENTAL INFORMATION DISCLOSURE	Filing Date Confirmation Number First Named Inventor	7748 David A. Morgenstern
STATEMENT BY APPLICANT	Group Art Unit Examiner Name	John S. Mapleis
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		U.S.	Patent Docum	ent	Name of Patentee or Applicant of	Date of Publication of Cited Document											
Examiner Initials*	Cite No.1	Number		Code (if	Cited Document	MM-DD-YYYY											
		_		known)	Wilbur A. Lazier	10-09-1934											
AE	99	1,975,853			Hugh J. Hagemeyer, Jr., et al.	05-31-1966											
AE	100	3,254,128			Thaddeus S. Franczyk, II et al.	11-11-2003											
	101	100		B2	Inaddeus S. Flanceski, III												
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	Application Number		10687541	
	Filing Date		2003-10-16	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	First Named Inventor Morg		orgenstern	
	Art Unit		1745	
(Not for Submission under 37 Of it 1.33)	Examiner Name John		hn S. Maples	
	Attorney Docket Number		40-21(52925)C; MTC 6888.2	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		10687541		
Filing Date		2003-10-16		
First Named Inventor Morg		enstern		
Art Unit		1745		
Examiner Name	John S. Maples			
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